CLAIMS

1. A fastener system for attaching a chainring to a bicycle crank, comprising:

a nut comprising of an internally threaded cylinder, an external flange on one end of said cylinder, and a tool interface means formed inside said cylinder;

a bolt that threadedly engages said nut, comprising of an externally threaded shaft, a flange on one end of said shaft, and a tool interface means formed inside said shaft;

whereby said bolt and said nut tighten together to clamp a chainring to a bicycle crank support arm.

2. The fastener system according to claim 1, wherein said tool interface means of said nut and said bolt are of equal shape such that the same tool can be used with either said nut or said bolt.

3. The fastener system according to claim 1, wherein said tool interface means of said nut and said bolt are of different sizes such that the torque capacity of said tool interface means is maximized.

4. A fastener system for attaching a plurality of chainrings to a bicycle crank, comprising:

a nut comprising of an internally threaded cylinder, an external flange on one end of said cylinder, and a tool interface means formed inside said cylinder;

a bolt that threadedly engages said nut, comprising of an externally threaded shaft, a flange on one end of said shaft, and a tool interface means formed inside said shaft;

whereby said bolt and said nut tighten together to clamp a plurality of chainrings to a bicycle crank support arm.

5. The fastener system according to claim 2, wherein said tool interface means of said nut and said bolt are of equal shape such that the same tool can be used with either said nut or said bolt.

6. The fastener system according to claim 2, wherein said tool interface means of said nut and said bolt are of different sizes such that the torque capacity of said tool interface means is maximized.

7. A bicycle crank assembly comprising:

a crank arm;

chainring support means attached to said crank arm;

one or more chainrings attached to said chainring support means by a nut and bolt system;

said nut comprising of an internally threaded cylinder, a external flange on one end of said cylinder, and a tool interface means formed inside said cylinder;

said bolt comprising of an externally threaded shaft that threadedly engages with said nut, a flange on one end of said shaft, and a tool interface means formed inside said shaft;

whereby said nut and said bolt tighten together and fixedly clamp said chainrings to said chainring support means.

8. The bicycle crank assembly according to claim 7, wherein said tool interface means of said nut and said bolt are of equal shape such that the same tool can be used with either said nut or said bolt.

9. The bicycle crank assembly according to claim 7, wherein said tool interface means of said nut and said bolt are of different sizes such that the torque capacity of said tool interface means is maximized.

10. The bicycle crank assembly according to claim 7, wherein said tool interface means of said bolt faces to the outside of said crank assembly.

11. The bicycle crank assembly according to claim 7, wherein said tool interface means of said nut faces to the outside of said crank assembly.

12. A bicycle with a crank assembly comprising:

a crank arm;

chainring support means attached to said crank arm;

one or more chainrings attached to said chainring support means by a nut and bolt system;

said nut comprising of an internally threaded cylinder, a external flange on one end of said cylinder, and a tool interface means formed inside said cylinder;

said bolt comprising of an externally threaded shaft that threadedly engages with said nut, a flange on one end of said shaft, and a tool interface means formed inside said shaft;

whereby said nut and said bolt tighten together and fixedly clamp said chainrings to said chainring support means.